JOURNALCTL CHEAT SHEET (DFIR EDITION)

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BEFORE YOU START

export SYSTEMD_PAGER=

Set SYSTEMD_PAGER to null so that output lines wrap instead of scrolling.

journalctl -D /path/to/directory journalctl --file=somefile

Journal logs are normally found under /var/log/journal/MACHINE_ID Use the -D switch to specify an alternate directory, or --file to select individual files

journalctl --header

Summarizes information from each journal file. Includes first/last dates, boot number, number of objects, etc.

OUTPUT MODES

-q -o short

Syslog-style output w/o extra header

- -q -o short-iso --utc
 Better timestamp, force UTC output
- -o json
 Single line JSON, for script processing
- -o json-prettyMulti-line JSON for readability

SIMPLE SEARCH CRITERIA

- --facility=name
 Search by Syslog facility name
- -u name.serviceSearch by Systemd unit name
- -t identifierMatch SYSLOG_IDENTIFIER field
- -g regexPCRE match against log message text

SPECIFY TIME RANGES

- -S, --since
- -U, --until

Search after/before specified time

Sample time specifiers:

- -S 2024-08-07 09:30:00
- -S 2024-07-24
- -U yesterday
- -U "15 minutes ago"
- -S -1hr
- -S 2024-07-24 -U yesterday

OTHER FIELDS

journalctl -N

List all field names found in journal

journalctl -F field

List all values found for given field

journalctl FIELD=value

Match entries where named FIELD equals chosen value

EXAMPLE COMMANDS

- journalctl -q -o short --facility=authpriv
 Recreate /var/log/auth.log
- journalctl -q -o short-iso -u ssh -g Accepted
 Who is logging in with SSH and from where?
- journalctl -q -o short-iso _UID=1000 Find messages related to a given user ID

- journalctl -q -o short-monotonic --dmesg
 Recreates traditional dmesg output
- journalctl -q -o short-iso -t sudo -g COMMAND= -r
 Pull interesting Sudo-related messages, most recent first (-r)
- journalctl -q -o short-iso -f
 On live system, show continuous logs (like tail -f), Ctrl-C aborts